

AMENDMENT

1 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising:

determining a set of risk factors from a risk factor model,

receiving a set of fund sensitivity coefficients and storing the set of fund sensitivity coefficients on computer readable media, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors, and

using computer means to create a proxy portfolio having substantially the same sensitivity coefficients as the fund,

wherein the proxy portfolio does not reveal the fund assets.

2 (Previously Presented). The method of claim 1, further comprising:

calculating an estimated value for the fund based on the value of the proxy portfolio, wherein the step of calculating the estimated value is repeated periodically throughout a trading period, and

publishing the estimated value periodically throughout the trading period.

3 (Previously Presented). The method of claim 1, further comprising:

creating a hedging portfolio, wherein the hedging portfolio has substantially the same sensitivity coefficients as the fund.

4 (Previously Presented). The method of claim 1, wherein the risk factor model is an economic risk factor model.

5 (previously presented). The method of claim 4, wherein at least one risk factor is selected from the group of risk factors consisting of: unexpected changes in default premiums, unexpected interest rate changes, unexpected changes in inflation rates, unexpected changes in

long term economic growth, market risk as measured by a benchmark index, unexpected changes in debt term structure, risk premium, firm size effects, leverage, and book-to-market equity.

6 (Previously Presented). The method of claim 1, wherein the risk factor model is a statistical risk factor model.

7 (Previously Presented). The method of claim 3, wherein the risk factor model is a statistical risk factor model.

8 (Previously Presented). The method of claim 3, wherein the risk factor model is an economic risk factor model.

9 (Previously Presented). The method of claim 6, wherein the risk factor model is a principal components analysis.

10 (Previously Presented). The method of claim 1, further comprising the step of selecting securities for a proxy universe, wherein the step of creating a proxy portfolio involves calculating weights of securities in the proxy universe.

11 (Previously Presented). The method of claim 10, wherein the risk factors are calculated by orthogonalizing a correlation matrix of returns functions of the securities in the proxy universe.

12 (Previously Presented). The method of claim 11, wherein the step of measuring the exposure of the fund to the set of risk factors includes a linear least squares regression.

13 (Previously Presented). The method of claim 12, further comprising the steps of:
 sorting the securities in the proxy universe into a plurality of groups,
 creating a correlation matrix of returns functions of the securities in each group of securities, thereby creating a correlation matrix for each group,
 orthogonalizing the correlation matrix for each group to produce a first set of eigenvalues and corresponding eigenvectors for each group,

arranging the first set of eigenvalues for each group in descending order,

eliminating a number of the smallest eigenvalues from the first set of eigenvalues and their corresponding eigenvectors from each group according to predetermined elimination criteria to produce a reduced set of principal components for each group,

creating a correlation matrix between all of the principal components in the reduced set of principal components for each group,

orthogonalizing the correlation matrix between all of the principal components in the reduced set of principal components for each group to produce a second set of eigenvalues and corresponding eigenvectors for all reduced groups,

eliminating a number of the smallest eigenvalues and their corresponding eigenvectors from the second set of eigenvalues and corresponding eigenvectors to produce a set of risk factors.

14-16 (Canceled).

17 (Previously Presented). A system for permitting efficient trading of shares of a fund without revealing the fund assets, comprising:

computer means programmed to determine a set of risk factors from a risk factor model,

a network through which the computer means receives a set of fund sensitivity coefficients, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors,

wherein the computer means creates a proxy portfolio with substantially the same sensitivity coefficients as the fund, and wherein the proxy portfolio does not reveal the fund assets.

18 (Previously Presented). The system of claim 17, wherein the computer means calculates an estimated value for the fund based on the value of the proxy portfolio periodically throughout a

trading period and transmits the estimated value through the network to publish the estimated value periodically throughout the trading period.

19 (Previously Presented). The system of claim 17, wherein the computer means creates a hedging portfolio with substantially the same sensitivity coefficients as the fund.

20 (Previously Presented). The system of claim 17, wherein the risk factor model is an economic risk factor model.

21 (Previously Presented). The system of claim 20, wherein at least one risk factor is selected from the group of risk factors consisting of: unexpected changes in default premiums, unexpected interest rate changes, unexpected changes in inflation rates, unexpected changes in long term economic growth, market risk as measured by a benchmark index, unexpected changes in debt term structure, risk premium, firm size effects, leverage, and book-to-market equity.

22 (Previously Presented). The system of claim 17, wherein the risk factor model is a statistical risk factor model.

23 (Previously Presented). The system of claim 19, wherein the risk factor model is a statistical risk factor model.

24 (Previously Presented). The system of claim 22, wherein the risk factor model is a principal components analysis.

25 (Previously Presented). The system of claim 17, wherein the computer means creates a proxy portfolio by calculating weights of securities in a proxy universe.

26 (Previously Presented). The system of claim 22, wherein the risk factors are calculated by orthogonalizing a correlation matrix of returns functions of the securities in the proxy universe.

27 (Previously Presented). The system of claim 26, wherein the computer means measures the exposure of the fund to the set of risk factors by a linear least squares regression.

28 (Previously Presented). The system of claim 27, wherein the computer means is programmed to:

- sort the securities in the proxy universe into a plurality of groups,

- create a correlation matrix of returns functions of the securities in each group of securities, thereby creating a correlation matrix for each group,

- orthogonalize the correlation matrix for each group to produce a first set of eigenvalues and corresponding eigenvectors for each group,

- arrange the first set of eigenvalues for each group in descending order,

- eliminate a number of the smallest eigenvalues from the first set of eigenvalues and their corresponding eigenvectors from each group according to predetermined elimination criteria to produce a reduced set of principal components for each group,

- create a correlation matrix between all of the principal components in the reduced set of eigenvectors for each group,

- orthogonalize the correlation matrix between all of the principal components in the reduced set of principal components for each group to produce a second set of eigenvalues and corresponding eigenvectors for all reduced groups, and

- eliminate a number of the smallest eigenvalues and their corresponding eigenvectors from the second set of eigenvalues and corresponding eigenvectors to produce a set of risk factors.

29–32 (Canceled).

33 (Previously Presented). A data storage device storing software to permit efficient trading of shares of a fund without revealing the fund assets, the software having instructions for causing computer means to execute the steps of:

- determining a set of risk factors from a risk factor model,

receiving a set of fund sensitivity coefficients, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors, and

creating a proxy portfolio, wherein the proxy portfolio has substantially the same sensitivity coefficients as the fund, and wherein the proxy portfolio does not reveal the fund assets.

34 (Previously Presented). The data storage device of claim 33, the software on the data storage device further having instructions for causing computer means to execute the steps of:

calculating an estimated value for the fund based on the value of the proxy portfolio, wherein the step of calculating the estimated value is repeated periodically throughout a trading period, and

publishing the estimated value periodically throughout the trading period.

35 (Previously Presented). The data storage device of claim 33, the software on the data storage device further having instructions for causing computer means to execute the steps of:

creating a hedging portfolio, wherein the hedging portfolio has substantially the same sensitivity coefficients as the fund.

36 (Previously Presented). The data storage device of claim 33, wherein the risk factor model is an economic risk factor model.

37 (Previously Presented). The data storage device of claim 36, wherein at least one risk factor is selected from the group of risk factors consisting of: unexpected changes in default premiums, unexpected interest rate changes, unexpected changes in inflation rates, unexpected changes in long term economic growth, market risk as measured by a benchmark index, unexpected changes in debt term structure, risk premium, firm size effects, leverage, and book-to-market equity.

38 (Previously Presented). The data storage device of claim 33, wherein the risk factor model is a statistical risk factor model.

39 (Previously Presented). The data storage device of claim 35, wherein the risk factor model is a statistical risk factor model.

40 (Previously Presented). The data storage device of claim 38, wherein the risk factor model is a principal components analysis.

41 (Previously Presented). The data storage device of claim 33, the software on the data storage device further having instructions for causing computer means to execute the step of selecting securities for a proxy universe, wherein the step of creating a proxy portfolio involves calculating weights of securities in the proxy universe.

42 (Previously Presented). The data storage device of claim 41, wherein the risk factors are calculated by orthogonalizing a correlation matrix of returns functions of the securities in the proxy universe.

43 (Previously Presented). The data storage device of claim 42, wherein the step of measuring the exposure of the fund to the set of risk factors includes a linear least squares regression.

44 (Previously Presented). The data storage device of claim 43, the software on the data storage device further having instructions for causing a computer to execute the steps of:

 sorting the securities in the proxy universe into a plurality of groups,

 creating a correlation matrix of returns functions of the securities in each group of securities, thereby creating a correlation matrix for each group,

 orthogonalizing the correlation matrix for each group to produce a first set of eigenvalues and corresponding eigenvectors for each group,

 arranging the first set of eigenvalues for each group in descending order,

 eliminating a number of the smallest eigenvalues from the first set of eigenvalues and their corresponding eigenvectors from each group according to predetermined elimination criteria to produce a reduced set of principal components for each group,

creating a correlation matrix between all of the principal components in the reduced set of principal components for each group,

orthogonalizing the correlation matrix between all of the principal components in the reduced set of principal components for each group to produce a second set of eigenvalues and corresponding eigenvectors for all reduced groups,

eliminating a number of the smallest eigenvalues and their corresponding eigenvectors from the second set of eigenvalues and corresponding eigenvectors to produce a set of risk factors.

45-46 (Canceled).

47 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising:

receiving or calculating a set of risk factors from a risk factor model,

storing the set of risk factors on computer readable media, and

using computer means to calculate a set of fund sensitivity coefficients, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors, and wherein the fund sensitivity coefficients do not reveal the fund assets.

48 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising:

using computer means to create a proxy portfolio from a set of fund sensitivity coefficients, wherein each fund sensitivity coefficient specifies the exposure of the fund to a risk factor, and wherein the proxy portfolio does not reveal the fund assets.

49 (Previously Presented). The method of claim 48, further comprising:

calculating an estimated value for the fund based on the value of a proxy portfolio, wherein the step of calculating the estimated value is repeated periodically throughout a trading period, and

publishing the estimated value periodically throughout the trading period.

50 (Previously Presented). The method of claim 47, further comprising:

creating a hedging portfolio, wherein the hedging portfolio has substantially the same sensitivity coefficients as the fund.

51 (Previously Presented). The method of claim 47, wherein the risk factor model is an economic risk factor model.

52 (Previously Presented). The method of claim 47, wherein the risk factor model is a statistical risk factor model.

53 (Previously Presented). The method of claim 52, wherein the risk factor model is a principal components analysis.

54 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising the steps:

sorting securities in a proxy universe into a plurality of groups,

creating a correlation matrix of returns functions of the securities in each group of securities, thereby creating a correlation matrix for each group,

using computer means to orthogonalize the correlation matrix for each group to produce a first set of eigenvalues and corresponding eigenvectors for each group,

arranging the first set of eigenvalues for each group in descending order,

eliminating a number of the smallest eigenvalues from the first set of eigenvalues and their corresponding eigenvectors from each group according to predetermined elimination criteria to produce a reduced set of principal components for each group,

creating a correlation matrix between all of the principal components in the reduced set of principal components for each group,

using the computer means to orthogonalize the correlation matrix between all of the principal components in the reduced set of principal components for each group to produce a second set of eigenvalues and corresponding eigenvectors for all reduced groups,

eliminating a number of the smallest eigenvalues and their corresponding eigenvectors from the second set of eigenvalues and corresponding eigenvectors to produce a set of risk factors, wherein the set of risk factors does not reveal the fund assets.

55 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising the steps of:

receiving a set of fund sensitivity coefficients indicating the exposure of the fund to a set of risk factors;

storing the set of fund sensitivity coefficients on computer readable media; and

using computer means to create a proxy portfolio from securities selected from a proxy universe of securities, wherein the proxy portfolio has substantially the same sensitivity coefficients as the fund, and wherein the proxy portfolio does not reveal the fund assets.

56 (Previously Presented). An exchange traded fund whose assets are not publicly disclosed on a daily basis, wherein an estimated value of the fund is calculated by:

determining a set of risk factors from a risk factor model;

determining a set of fund sensitivity coefficients and storing the set of fund sensitivity coefficients on computer readable media, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors;

storing the fund sensitivity coefficients on computer readable media;

using computer means to create a proxy portfolio having substantially the same sensitivity coefficients as the fund; and

calculating the estimated value of the fund based on the value of the proxy portfolio, wherein the proxy portfolio does not reveal the fund assets.

57 (Previously Presented). A method for calculating an estimated value for an exchange traded fund without publicly disclosing the assets of the exchange traded fund, comprising:

determining a set of risk factors from a risk factor model;

receiving or calculating a set of fund sensitivity coefficients, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors;

using computer means to create a proxy portfolio with substantially the same sensitivity coefficients as the fund;

using computer means to calculate the estimated value for the fund based on the value of the proxy portfolio, wherein the proxy portfolio does not reveal the fund assets.

58 (previously presented). The method of claim 57, further comprising the step of disseminating the estimated value for the fund periodically throughout the day.

59 (Previously Presented). A method comprising trading shares of a fund without revealing the fund assets, wherein an estimated value for the fund is derived from a method comprising:

determining a set of risk factors from a risk factor model;

determining or receiving a set of fund sensitivity coefficients and storing the set of fund sensitivity coefficients on computer readable media, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors;

storing the fund sensitivity coefficients on computer readable media;

using computer means to create a proxy portfolio having substantially the same sensitivity coefficients as the fund; and

calculating the estimated value of the fund based on the value of the proxy portfolio, wherein the proxy portfolio does not reveal the fund assets.

60 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising:

determining a set of risk factors from a risk factor model,

receiving a set of fund sensitivity coefficients and storing the set of fund sensitivity coefficients on computer readable media, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors,

using computer means to create a proxy portfolio having substantially the same sensitivity coefficients as the fund, wherein the proxy portfolio does not reveal the fund assets,

calculating an estimated value for the fund based on the value of the proxy portfolio, wherein the step of calculating the estimated value is repeated periodically throughout a trading period, and

publishing the estimated value periodically throughout the trading period.

61 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising:

determining a set of risk factors from a risk factor model,

receiving a set of fund sensitivity coefficients and storing the set of fund sensitivity coefficients on computer readable media, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors,

using computer means to create a proxy portfolio having substantially the same sensitivity coefficients as the fund, and

creating a hedging portfolio, wherein the hedging portfolio has substantially the same sensitivity coefficients as the fund, and wherein the hedging portfolio does not reveal the fund assets.

62-73 (Canceled).

74 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising:

determining a set of risk factors from a risk factor model,

receiving a set of fund sensitivity coefficients and storing the set of fund sensitivity coefficients on computer readable media, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors, and

using computer means to create a proxy portfolio having substantially the same sensitivity coefficients as the fund.

75 (Currently Amended). The method of claim ~~[1]~~ 74, further comprising:

calculating an estimated value for the fund based on the value of the proxy portfolio, wherein the step of calculating the estimated value is repeated periodically throughout a trading period, and

publishing the estimated value periodically throughout the trading period.

76 (Currently Amended). The method of claim ~~[1]~~ 74, further comprising:

creating a hedging portfolio, wherein the hedging portfolio has substantially the same sensitivity coefficients as the fund.

77 (Currently Amended). The method of claim ~~[1]~~ 74, wherein the risk factor model is an economic risk factor model.

78 (Currently Amended). The method of claim ~~[4]~~ 77, wherein at least one risk factor is selected from the group of risk factors consisting of: unexpected changes in default premiums, unexpected interest rate changes, unexpected changes in inflation rates, unexpected changes in long term economic growth, market risk as measured by a benchmark index, unexpected changes in debt term structure, risk premium, firm size effects, leverage, and book-to-market equity.

79 (Currently Amended). The method of claim ~~[1]~~ 74, wherein the risk factor model is a statistical risk factor model.

80 (Currently Amended). The method of claim ~~[3]~~ 76, wherein the risk factor model is a statistical risk factor model.

81 (Currently Amended). The method of claim ~~[3]~~ 76, wherein the risk factor model is an economic risk factor model.

82 (Currently Amended). The method of claim ~~[6]~~ 79, wherein the risk factor model is a principal components analysis.

83 (Currently Amended). The method of claim ~~[1]~~ 74, further comprising the step of selecting securities for a proxy universe, wherein the step of creating a proxy portfolio involves calculating weights of securities in the proxy universe.

84–86 (Canceled).

87 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising:

receiving or calculating a set of risk factors from a risk factor model,

determining a set of fund sensitivity coefficients, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors, and wherein the fund sensitivity coefficients do not reveal the fund assets.

88 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising:

creating a proxy portfolio from a set of fund sensitivity coefficients, wherein each fund sensitivity coefficient specifies the exposure of the fund to a risk factor, and wherein the proxy portfolio does not reveal the fund assets.

89 (Previously Presented). The method of claim 88, further comprising:

calculating an estimated value for the fund based on the value of a proxy portfolio, wherein the step of calculating the estimated value is repeated periodically throughout a trading period, and

publishing the estimated value periodically throughout the trading period.

90 (Previously Presented). The method of claim 87, further comprising:

creating a hedging portfolio, wherein the hedging portfolio has substantially the same sensitivity coefficients as the fund.

91 (Previously Presented). The method of claim 87, wherein the risk factor model is an economic risk factor model.

92 (Previously Presented). The method of claim 87, wherein the risk factor model is a statistical risk factor model.

93 (Previously Presented). The method of claim 92, wherein the risk factor model is a principal components analysis.

94 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising the steps of:

receiving a set of fund sensitivity coefficients indicating the exposure of the fund to a set of risk factors; and

creating a proxy portfolio from securities selected from a proxy universe of securities, wherein the proxy portfolio has substantially the same sensitivity coefficients as the fund, and wherein the proxy portfolio does not reveal the fund assets.

95 (Previously Presented). A method for calculating an estimated value for an exchange traded fund without publicly disclosing the assets of the exchange traded fund, comprising:

determining a set of risk factors from a risk factor model;

receiving or calculating a set of fund sensitivity coefficients, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors;

creating a proxy portfolio with substantially the same sensitivity coefficients as the fund;
and

calculating the estimated value for the fund based on the value of the proxy portfolio,
wherein the proxy portfolio does not reveal the fund assets.

96 (Previously Presented). The method of claim 95, further comprising the step of disseminating the estimated value for the fund periodically throughout the day.

97 (Previously Presented). A method comprising trading shares of a fund without revealing the fund assets, wherein an estimated value for the fund is derived from a method comprising:

determining a set of risk factors from a risk factor model;

determining or receiving a set of fund sensitivity coefficients, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors;

creating a proxy portfolio having substantially the same sensitivity coefficients as the fund; and

calculating the estimated value of the fund based on the value of the proxy portfolio,
wherein the proxy portfolio does not reveal the fund assets.

98 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising:

determining a set of risk factors from a risk factor model,

receiving a set of fund sensitivity coefficients, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors,

creating a proxy portfolio having substantially the same sensitivity coefficients as the fund, wherein the proxy portfolio does not reveal the fund assets,

calculating an estimated value for the fund based on the value of the proxy portfolio, wherein the step of calculating the estimated value is repeated periodically throughout a trading period, and

publishing the estimated value periodically throughout the trading period.

99 (Previously Presented). A method for permitting efficient trading of shares of a fund without revealing the fund assets, comprising:

determining a set of risk factors from a risk factor model,

receiving a set of fund sensitivity coefficients and storing the set of fund sensitivity coefficients on computer readable media, wherein each fund sensitivity coefficient specifies the exposure of the fund to one of the risk factors,

using computer means to create a proxy portfolio having substantially the same sensitivity coefficients as the fund, and

creating a hedging portfolio, wherein the hedging portfolio has substantially the same sensitivity coefficients as the fund, and wherein the hedging portfolio does not reveal the fund assets.

100–110 (Canceled).